

## 6.

Two New Pseudoscorpions of the Subfamily  
Lamprochernetinae from Venezuela.<sup>1</sup>

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(Text-figures 1-5).

[This is one of a series of papers resulting from the 45th and 46th Expeditions of the Department of Tropical Research of the New York Zoological Society, made during 1945 and 1946 under the direction of Dr. William Beebe, with headquarters at Rancho Grande in the National Park of Aragua, Venezuela. The expeditions were made possible through the generous cooperation of the National Government of Venezuela and of the Creole Petroleum Corporation.]

[The characteristics of the region are in brief as follows: Rancho Grande is located in north central Venezuela (10° 21' N. Lat., 67° 41' W. Long.), 80 kilometers west of Caracas, at an elevation of 1,100 meters, in the undisturbed montane cloud forest which covers this part of the Caribbean range of the Andes. Adjacent zones include seasonal forest, savanna, thorn woodland, cactus scrub, the fresh water Lake of Valencia and various marine littoral zones.]

[The Rancho Grande area is generally subtropical, being uniformly cool and damp throughout the year because of the prevalence of the mountain cloud cap. The average humidity during the expeditions, including parts of both wet and dry seasons, was 92.4%; the average temperature during the same period was 18° C.; the average annual rainfall over a five year period was 175 cm. The flora is marked by an abundance of mosses, ferns and epiphytes of many kinds as well as a few gigantic trees. For further details see Beebe and Crane, *Zoologica*, Vol. 32, No. 1, 1947. Unless otherwise stated, the specimens discussed in the present paper were taken in the montane cloud forest, within a radius of one kilometer of Rancho Grande.]

Three pseudoscorpions recently submitted to the writer for identification and study were collected at Rancho Grande, Venezuela, by the Expedition of the Department of Tropical Research, New York Zoological Society. Two of these individuals are described herein as belonging to new species. The third individual is a tritonymph and does not merit description at this time.

The specimens are deposited in the American Museum of Natural History.

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SUBORDER MONOPHYRONIDA  
CHAMBERLIN.

## FAMILY CHERNETIDAE CHAMBERLIN.

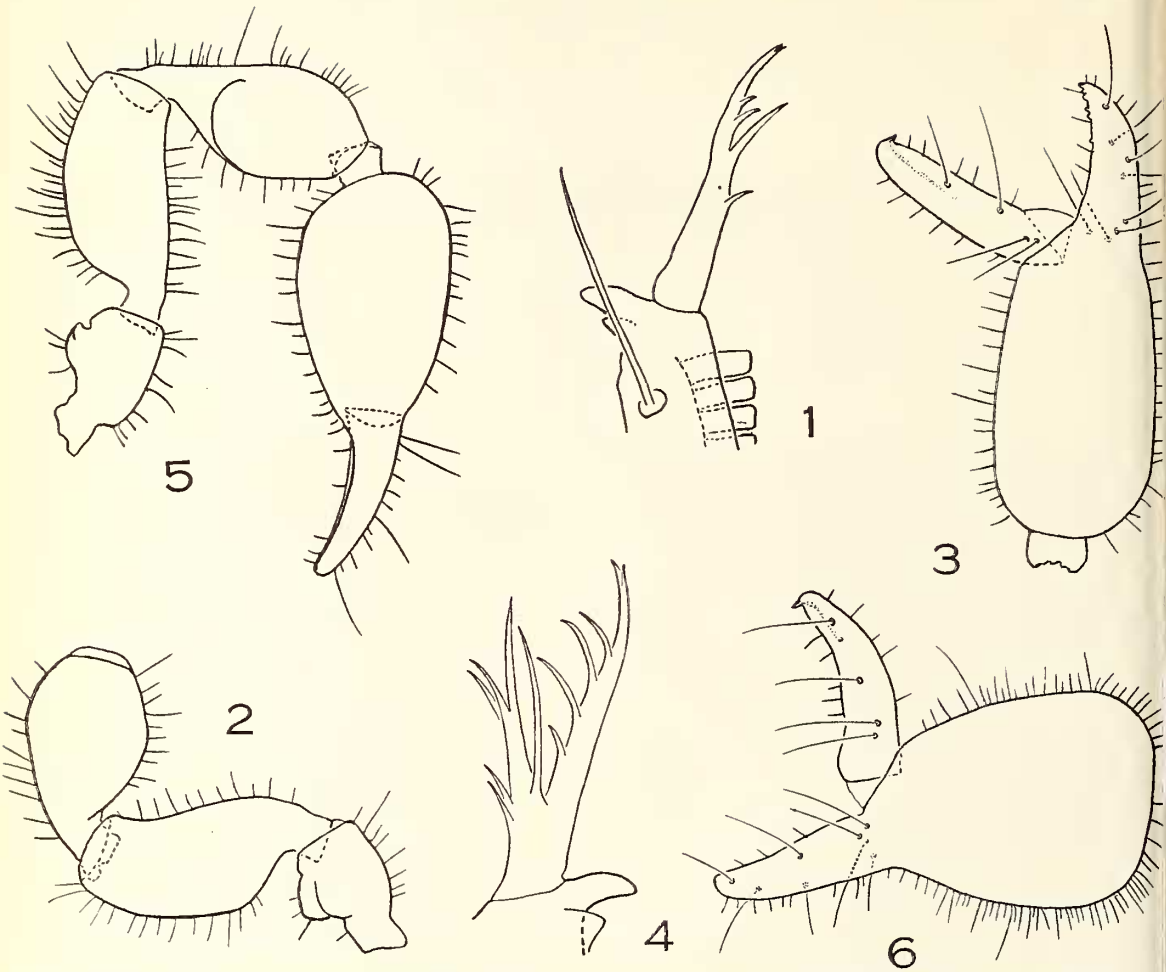
## Subfamily Lamprochernetinae Beier.

*Lustrochernes concinnus*, new species.

## Text-figures 1-3.

**FEMALE:** Body moderately stout; 3.45 mm. in length; appendages stout; body and legs light brown, carapace slightly deeper brown, palpi dark reddish-brown. Carapace virtually smooth; transverse furrows fairly well marked; lateral margins weakly convex, posterior margin nearly straight; setae acuminate, ten setae along the posterior margin; eye spots very weakly developed; length of carapace 1.05 mm., greatest width about 0.81 mm., width across the posterior margin little less. Abdomen fairly stout, length 2.4 mm., width about 1.4 mm. Tergites except the first and last divided, the anterior tergites not so strongly divided as the more posterior ones; first tergite with 15 setae; maximum number of setae on any tergal half is 10; setae acuminate; tergites virtually smooth. Sternites 5 through 10 divided; most sternal halves with 12 to 14 well-developed and acuminate setae; sternites virtually unsculptured. Anterior stigmatic plate with three setae, posterior plate with one.

*Chelicera:* Yellowish-brown in color; fairly stout; exterior surface of hand with a few netlike markings; interior and laminal setae very long, subbasal and basal setae much shorter and with one or two subdistal microspines; flagellum with the anterior blade unilaterally toothed; chelicera 0.3 mm. long, base 0.16 mm. wide. Fixed finger relatively slender and with a wide lamina exterior; inner margin of fixed finger with five somewhat retroconical teeth; three blunt denticles on the inner margin of the apical tooth; serrula interior with all but the distal four plates fused to form a velum. Movable finger little curved, 0.24 mm. long; subapical



TEXT-FIGS. 1-5. 1. *Lustrochernes concinnus*, new species, female holotype, tip of movable finger of chelicera. 2. Idem, dorsal view of palpal trochanter, femur, and tibia. 3. Idem, lateral view of chela to show the position of the tactile setae; marginal and most accessory teeth omitted. 4. *Cordylochernes potens*, new species, male holotype, galea. 5. Idem, dorsal view of palp. 6. Idem, lateral view of chela to show the position of the tactile setae; teeth of fingers omitted.

lobe near the apical tooth and not especially well developed; galeal seta not reaching nearly to the tip of the galea; serrula exterior composed of 19 or 20 ligulate plates; galea fairly stout with six simple rami, variable in length and confined to the distal two-thirds of the galea.

*Palpus*: Maxilla yellowish-brown, rest of palp deep reddish-brown; maxilla with smooth surface; the extensor surface of the trochanter with a few granules on the protuberances, the femur with the flexor surface granulate; a few granules on the distal portion of the flexor surface of the tibia; chela virtually smooth; investing setae numerous, long, and usually acuminate, sometimes with one or two minute subterminal microspines. Maxilla 0.56 mm. long, 0.34 mm. wide. Trochanter with two protuberances, one somewhat conical in shape and lateral in position,

the other bluntly rounded and subdorsal in position; pedicle stout; length of trochanter 0.48 mm., width 0.31 mm. Femur subsigmoid in general shape; inner or flexor margin S-shaped with a weak sinuation near the distal end of the flexor margin of the pedicle; extensor margin flatly convex; pedicle well differentiated and not so long as wide; length of femur about 0.79 mm., greatest width 0.38 mm. and located at about the basal one-third of the podomere. Tibia with stout pedicle; flexor margin well rounded; length 0.79 mm., width 0.395 mm. View of chela from the dorsad not obtained since one chela is missing from the specimen. Chela without pedicle about 1.35 mm. long; movable finger 0.65 mm. long. From the side, chela moderately stout, basal margin evenly rounded and passing without interruption into the somewhat flatly convex dorsal and ventral mar-

gins of the hand; fixed finger somewhat curved, movable finger nearly straight; length of hand without pedicle 0.81 mm., depth of hand 0.49 mm. Position of tactile setae as indicated in Text-fig. 3. Movable finger with 32 marginal teeth, those of the distal end of the row conical and cuspid, those of the proximal portion of the row rounded and acuspid; nine external accessory teeth evenly spaced along most of the finger margin; three internal accessory teeth clustered near the distal end of the finger; nodus ramosus located a little more than one areolar diameter proximal to tactile seta *t*. Fixed finger with marginal teeth similar to those of the opposing finger; five internal accessory teeth confined to the distal one-half of the finger; nine external accessory teeth confined to the distal two-thirds of the finger.

**Legs:** Light yellowish-brown in color; inner surfaces of podomeres unsculptured, outer surfaces with scalelike or netlike lines especially in the posterior legs; setae fairly numerous, acuminate, little more numerous on the distal than on the proximal podomeres. First leg with stout trochanter, 0.17 mm. long, 0.15 mm. deep; pars basalis 0.24 mm. long, 0.18 mm. deep; pars tibialis 0.48 mm. long, 0.20 mm. deep; entire femur 0.57 mm. in length; tibia stout, flexor margin a little convex, extensor margin proximally convex but distally very little concave, 0.44 mm. long, 0.13 mm. deep; tarsus subcylindrical, about 0.33 mm. long, 0.082 mm. deep. Fourth leg with trochanter 0.33 mm. long; pars basalis subtriangular, 0.34 mm. long, 0.245 mm. deep; pars tibialis stout, extensor margin evenly convex, flexor margin weakly convex, length 0.68 mm., depth 0.335 mm.; entire femur 0.83 mm. long; tibia shaped much as in the first leg except the distal portion of the extensor margin is very weakly convex, length 0.64 mm., depth 0.19 mm.; tarsus subcylindrical, a little deeper across the proximal end than elsewhere, length 0.44 mm., depth 0.12 mm.; a long tactile seta located 0.1 mm. from the proximal margin of the tarsus.

**Genital complex:** Anterior operculum with eight setae anterior to the genital pore and with a compact group of 14 smaller setae still more anterior; posterior operculum with 10 setae arranged in a single row along the margin.

**TYPE LOCALITY:** The female holotype from Rancho Grande, Venezuela. The specimen was taken from a Harlequin grasshopper.

*Lustrochernes concinnus* belongs to a subgroup of *Lustrochernes* in which identification is difficult. Our present species appears to be closely related to *L. subovatus* (With, 1908) from Argentina, *L. ovatus* (Balzan, 1891) reported from Venezuela to Paraguay, *L. communis* (Balzan, 1890) reported from Argentina to Dutch Guiana, and *L. dominicus* Hoff, 1944, from Dominica. From these

species, *L. concinnus* may be separated by the much more sigmoid shape of the palpal femur and the stouter condition of many of the pedal podomeres. In addition, the galea in *L. concinnus* is not bifurcated near the base. In general, our species may be separated from other members of the genus by the size and the length: width ratio of the palpal podomeres.

***Cordylochernes potens*, new species.**

Text-figures 4-6.

**MALE:** Body large, elongate; palpi stout, legs relatively slender; body and legs moderate to deep brown, carapace deep reddish-brown, palpi very dark reddish-brown; length of body 5.2 mm. Carapace with well-rounded anterior margin, lateral margins nearly straight and parallel behind the median furrow; furrows well impressed; eyes not distinguished in KOH treated specimen; surface finely but distinctly granulate anterior to the median furrow, smooth posterior to the furrow; setae fairly numerous, acuminate; setae of the posterior margin chiefly broken, but apparently about 16 in number; carapace nearly 1.6 mm. long, about 1.4 mm. in maximum width. Tergites 1 and 11 not divided, other tergites well divided; surface of tergites almost unsculptured but fine netlike lines observed in some areas; setae fairly numerous and acuminate; most tergal halves with about 10 setae. Sternites 4 through 10 divided; surface marked by weakly developed netlike lines; setae acuminate, sternite 4 with three setae on each half, some central sternal halves each with as many as 15 setae. Abdomen elongate in general shape, lateral margins weakly convex; length about 3.6 mm., width 1.8 mm. Pleural membranes marked by closely spaced parallel striations; each stigmatic plate apparently with six setae.

**Chelicera:** Brownish-yellow in color, fairly stout; external, basal, and subbasal setae with a minute subterminal microspine; interior and laminal setae very long and acuminate; the distal blade of the flagellum much flattened and with numerous acute denticles along the anterior border; length of chelicera about 0.47 mm., width of base 0.29 mm. Fixed finger a little curved; lamina exterior well developed; serrula interior with the distal five plates serrate and free, the last elongate, the other four platyform; inner margin of finger with six or seven denticles, inner margin of apical tooth with three weakly developed denticles. Movable finger fairly stout and little curved; serrula exterior of 26 ligulate plates; subapical tooth stout; three or four very small spinelike denticles on the inner finger margin near the level of the galeal seta and just proximal to the apical tooth; galeal seta not reaching the tip of the galea; galea with a very stout base, dividing near the basal one-fourth into two stout

branches and one very slender and shorter branch, each of the two stout branches with numerous simple rami along the margin; length of movable finger nearly 0.45 mm.

*Palpus*: Setae numerous, usually with one or two terminal and subterminal microspines; surface virtually smooth. Maxilla nearly as dark in color as the rest of the palp, 0.93 mm. long, 0.55 mm. wide. Trochanter with well-defined pedicle about as wide as long, a conspicuous subdorsal protuberance; length 0.97 mm., width about 0.59 mm. Femur with pedicle about as long as wide; flexor margin of femur with a very weakly developed concavity near the distal end; length 1.47 mm., width 0.64 mm. Tibia with flexor margin convex in the center; extensor margin straight to weakly concave in the basal half, convex beyond; a poorly developed but definite and distinct protuberance in the basal one-half, the protuberance placed subdorsal and not seen in profile in a strict dorsal view of the podomere; length 1.62 mm., width 0.71 mm. Hand with both flexor and extensor margins moderately convex; basal margin rounded and joining the other margins without interruption; fingers from dorsal gently curved; chela without pedicle 2.58 mm. in length, 0.96 mm. in width; hand without pedicle 1.46 mm. long, 1.21 mm. deep; movable finger 1.15 mm. in length. Hand from the side very heavy, ventral margin weakly convex, dorsal margin much more convex; hand deepest across the base; fixed finger stout and a little curved, movable finger a little less slender but much more curved. Tactile setae of chelal fingers as shown in Text-fig. 6. Fixed finger with about 55 marginal teeth, these contiguous and spaced along nearly the entire finger margin; marginal teeth of distal end of row conical and with a heavy cusp, those of proximal end of row rounded and with poorly developed cusps; external accessory teeth weakly developed, some apparently broken, probably about 16 arranged in the distal two-thirds of the finger; apparently 10 internal accessory teeth arranged in the distal one-half of the finger. Movable finger with marginal teeth similar in number and nature to those of the opposing finger; seven internal accessory teeth almost contiguous and lo-

cated in the distal one-third of the finger; numerous weakly developed external accessory teeth confined to the distal two-thirds of the finger; nodus ramosus located between tactile seta *t* and *st*, almost twice as far from the latter as from the former.

*Legs*: Relatively slender; setae numerous and long, often with one or two subterminal or terminal microspines; first leg reddish-brown in color, fourth leg lighter yellowish-brown; surface of some podomeres marked by weakly developed netlike lines. First leg with trochanter 0.34 mm. long, 0.27 mm. deep; pars basalis pedunculate, flexor margin very weakly convex, length measured along the flexor margin 0.42 mm., depth 0.33 mm.; pars tibialis with extensor margin weakly but evenly convex, flexor margin nearly straight, length measured along the extensor margin 0.81 mm., depth 0.29 mm.; length of entire femur 1.07 mm.; tibia with extensor margin weakly concave, flexor margin weakly convex, deepest near the distal end, 0.89 mm. long, 0.2 mm. deep; tarsus subcylindrical, length 0.61 mm., depth 0.13 mm. Fourth leg with relatively slender trochanter, 0.62 mm. long, 0.30 mm. deep; pars basalis subtriangular, with a long pseudotactile seta near the distal end of the flexor margin, 0.47 mm. long, 0.34 mm. deep; pars tibialis with extensor margin weakly and evenly convex, flexor margin nearly straight, length 1.10 mm., depth 0.39 mm.; entire femur 1.39 mm. long; tibia shaped much as the tibia of the first leg, with a pseudotactile seta near the center of the extensor margin, 1.22 mm. long, 0.23 mm. deep; tarsus subcylindrical, a tactile seta on the extensor margin 0.18 mm. from the proximal margin, length 0.76 mm., depth 0.155 mm.

*Genital complex*: Posterior operculum with 12 setae arranged chiefly in a single row; anterior operculum with 26 setae clustered anterior to and along the sides of the genital aperture.

*TYPE LOCALITY*: The single specimen, the male holotype, from Rancho Grande, Venezuela; 1945.

*Cordylochernes potens* may be separated from other members of the genus by the size, shape, and length : width ratios of the palpal podomeres.